

Estimation And Prediction Of Hospitalization And Medical Care Costs

Introduction

Overview:

Medical costs are one of the most common recurring expenses in a person's life. Based on different research studies, BMI, ageing, smoking, and other factors are all related to greater personal medical care costs.

The estimates of the expenditures of health care related to obesity are needed to help create cost-effective obesity prevention strategies. Obesity prevention at a young age is a top concern in global health, clinical practice, and public health.

Purpose:

- Medical expenses are the costs to treat or prevent an injury or disease, such as health insurance premiums, hospital visits, and prescriptions. These expenses are tax-deductible within certain limits.
- Personal health care expenditures—which account for the largest shares of total national health expenditures—are outlays for goods and services relating directly to patient care, such as hospital care, physicians' and dentists' services, prescription drugs, eyeglasses, and nursing home care.

1. Literature Survey:

Existing problem :

- The healthcare system has wasted hundreds of billions of dollars on supply chain inefficiencies, variation, service duplication, and suboptimal labor management. Unfortunately, the healthcare cost problem has put the industry in a financial quandary.
- They often allocate their costs to procedures, departments, and services based not on the actual resources used to deliver care but on how much they are reimbursed. But reimbursement itself is based on arbitrary and inaccurate

assumptions about the intensity of care. Poor costing systems have disastrous consequences.

Proposed Solution:

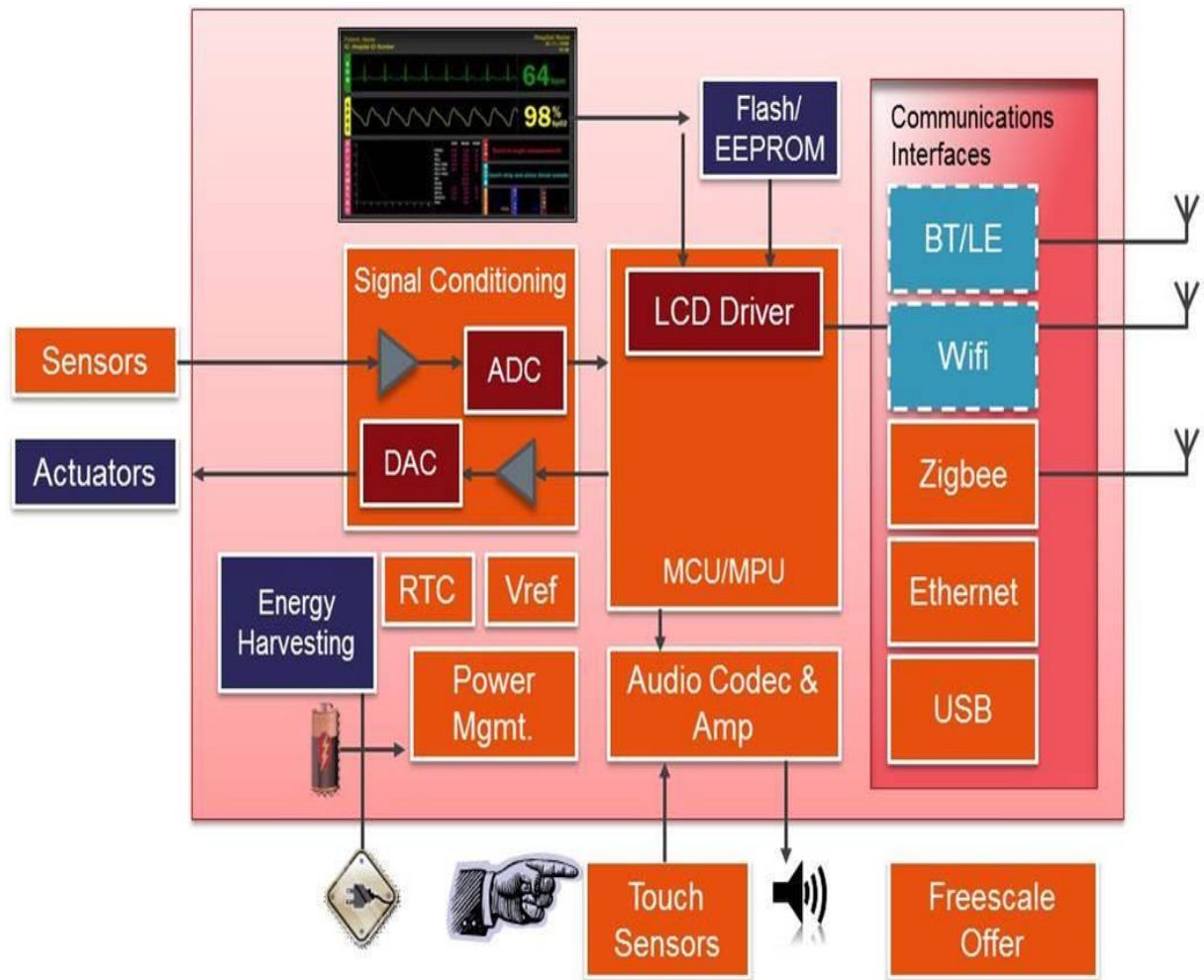
- For instance, setting up more medical colleges and increasing the number of healthcare professionals in the country is one of the solutions. The government is also encouraging more public-private partnerships to increase the number of healthcare facilities.
- India's healthcare system comprises both public and for-profit private providers. With a substantial presence of private institutions, 69.8% of total outpatient care falls under them. However, treatments from private service providers typically cost higher.

Throritical Analysis:

- Cost-effectiveness analysis (CEA) provides a formal assessment of trade-offs involving benefits, harms, and costs inherent in alternative options. CEA has been increasingly used to inform public and private organizations' reimbursement decisions, benefit designs, and price negotiations worldwide.
- Challenges in the analysis of health care costs. in medical literature. health carecosts. – p. 2/78 proportion of the population can usually be expected typical study period. Health care costs typically exhibit heteroscedasticity. al.,2000; Annual Reviews). – p. 3/78 means. means. means. means. conclusions. justified. justified. Regression models.

Block Diagram:

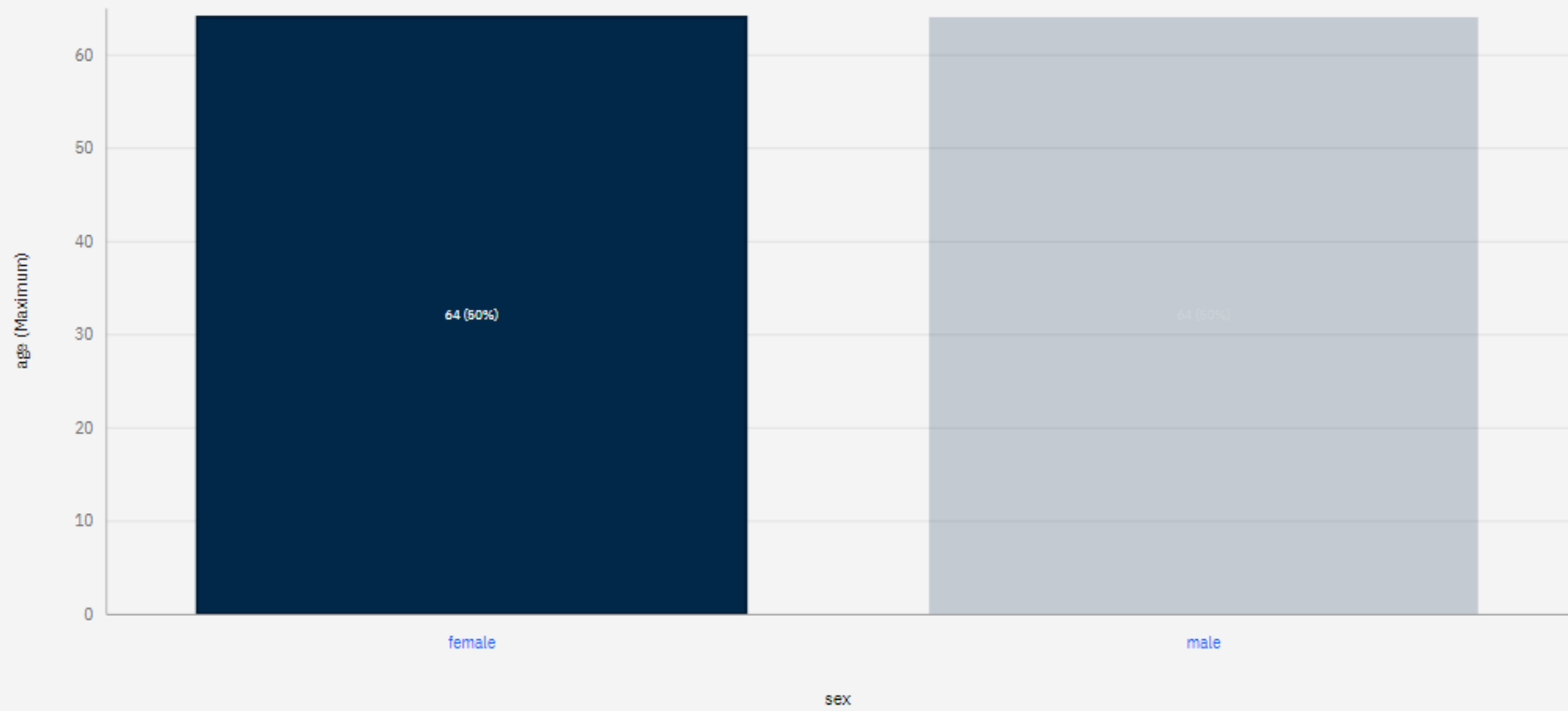
Healthcare Device Generic Architecture Today...



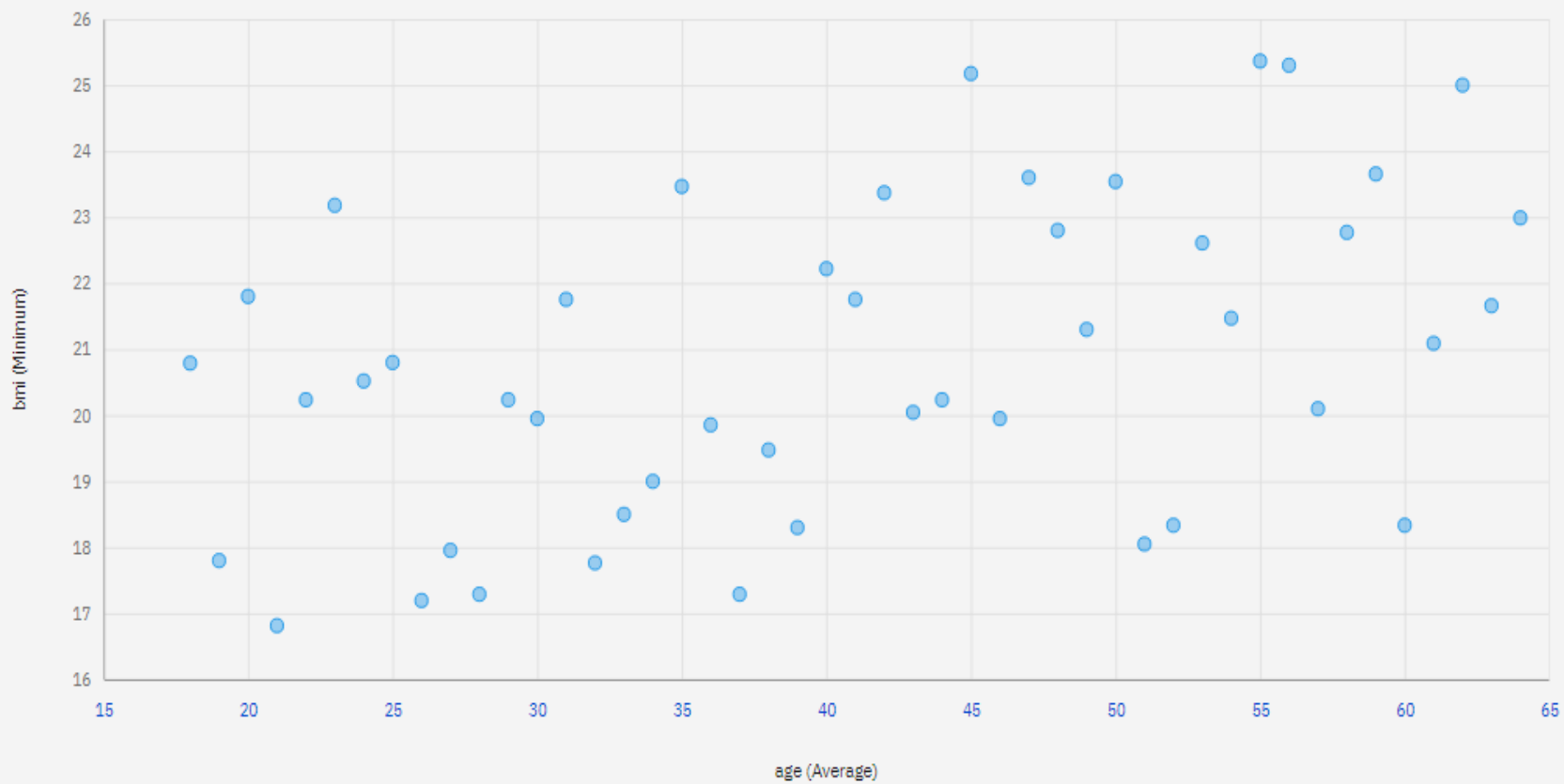
Hardware /Software Designing

The process of healthcare software development is quite similar to developing other apps with a few exceptions. We distinguish between computer software that is an integral part of medical devices and software that performs a role of a medical device itself. Their development is completely different.

Average Age Of Male And Female



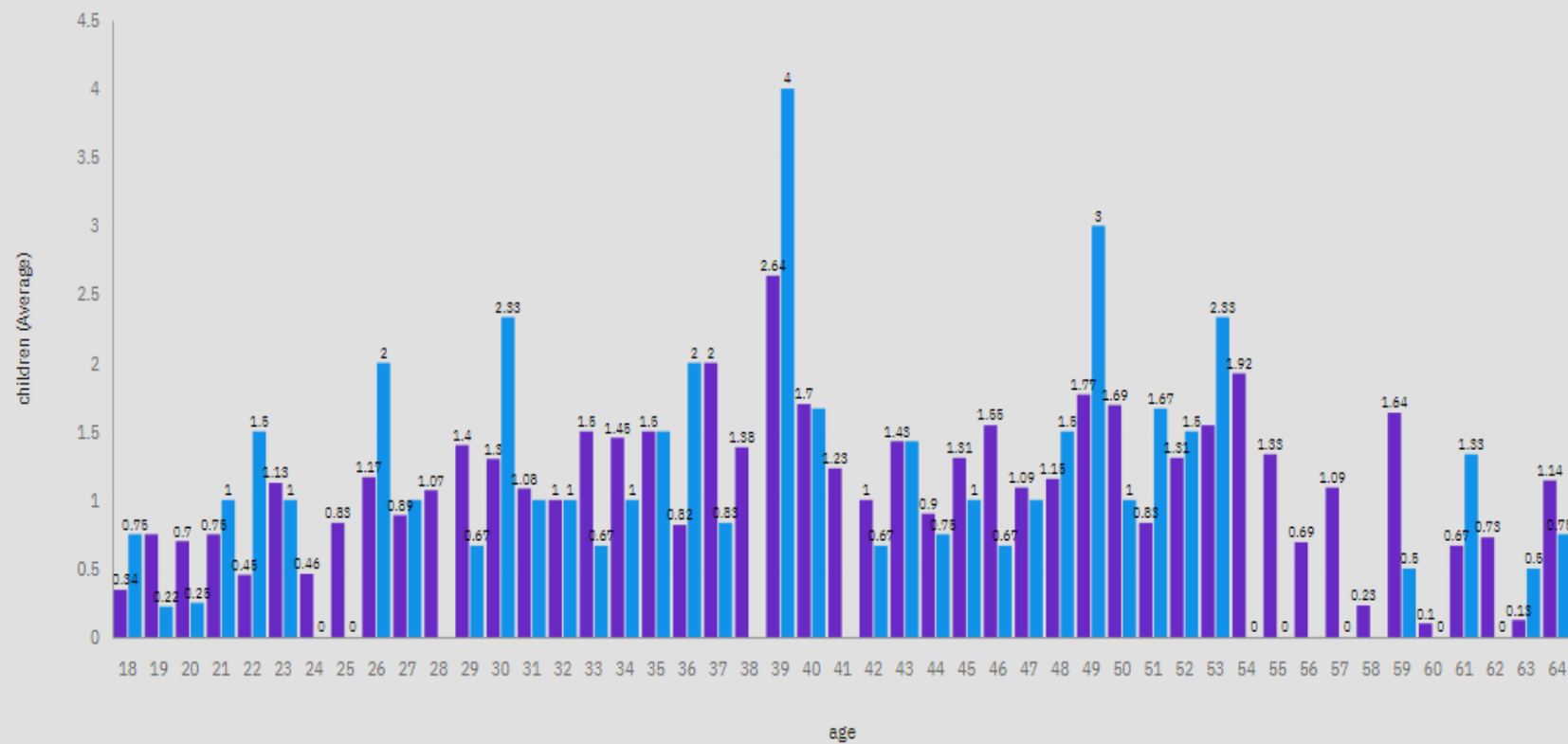
BMI Of Person Based On Their Age



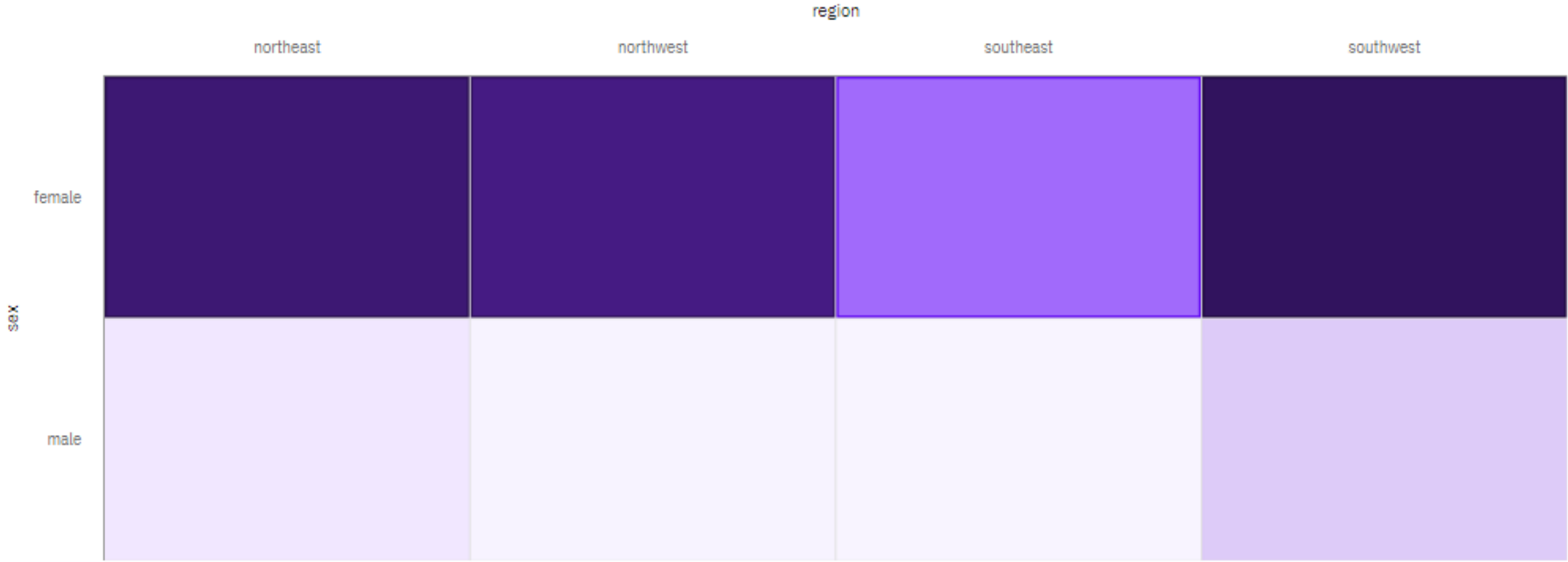
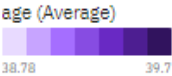
Average Number Of Children By Age And Smoker Or not



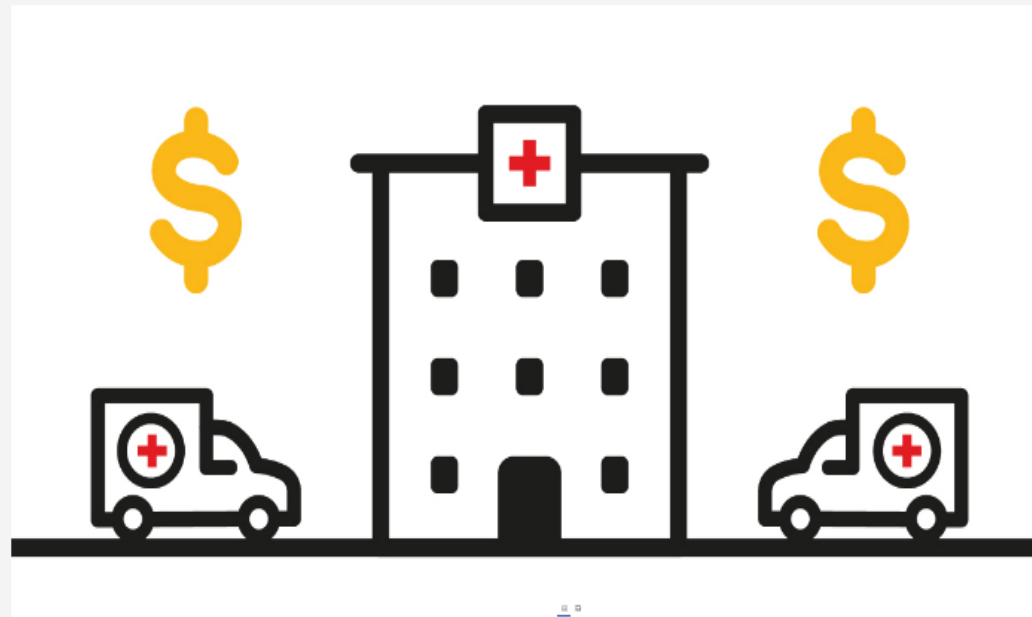
smoker
no yes



Average Age Of People According To Their Region And Gender

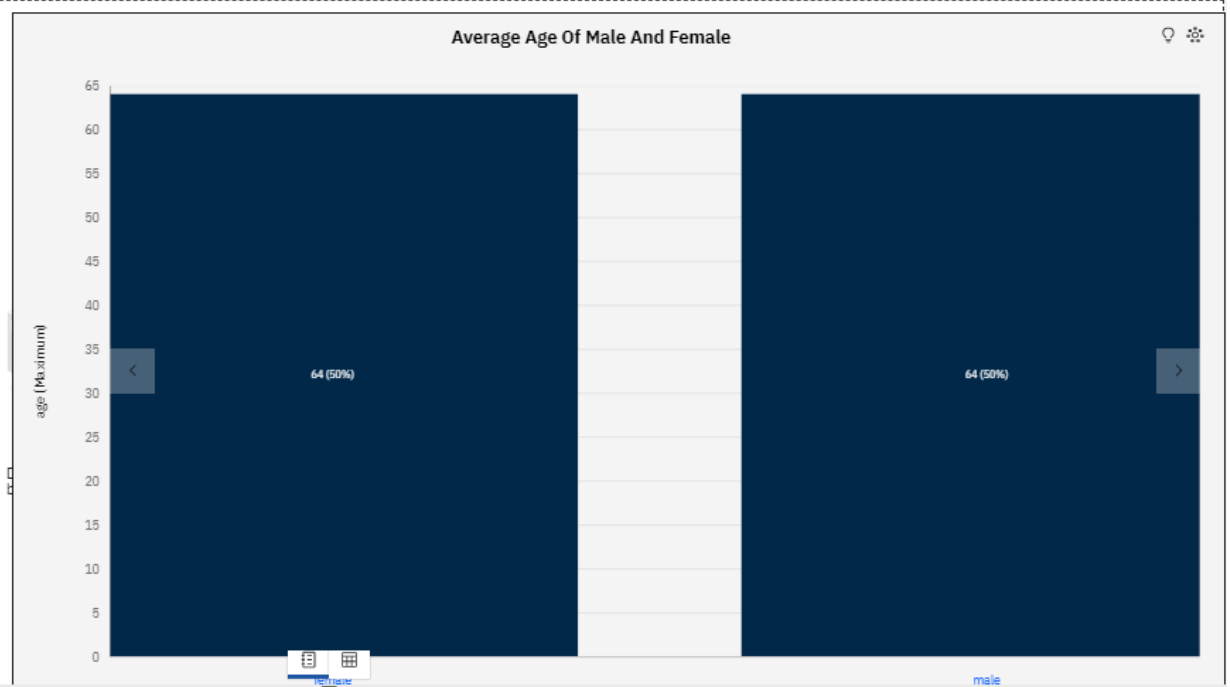


Medical Care Costs Story



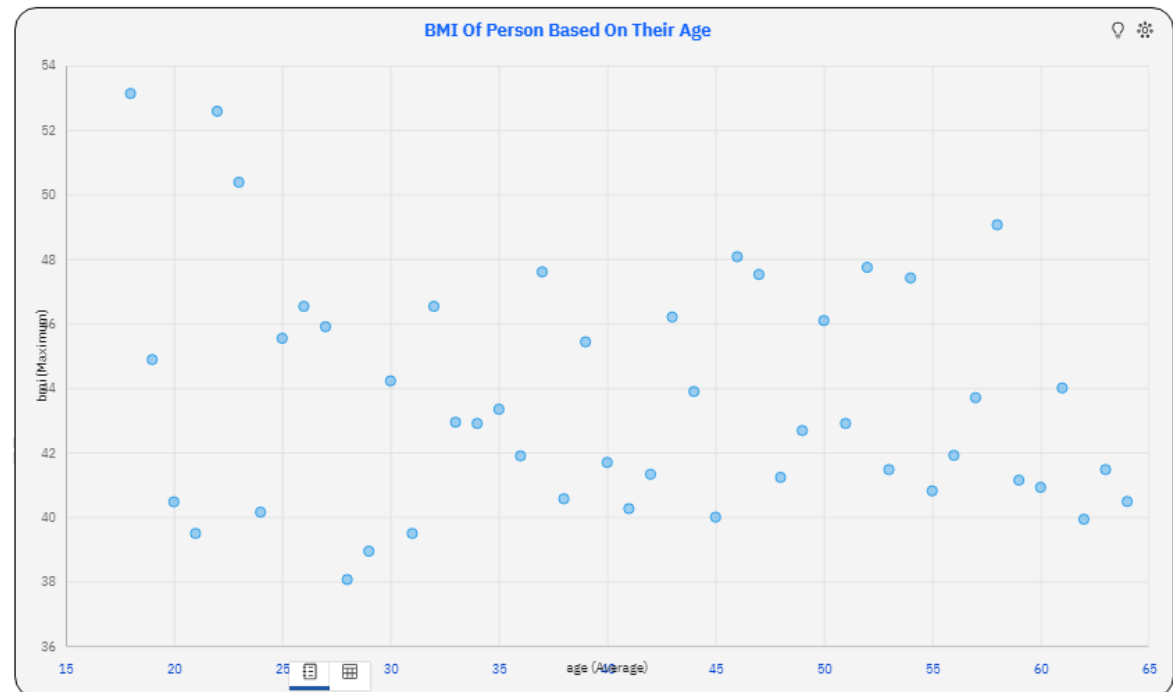
Medical Care Costs Story

- This graph mainly represents the average age of males and females and as we see the female average is higher
- the average of females is higher despite having a little bit less number of females in the overall dataset



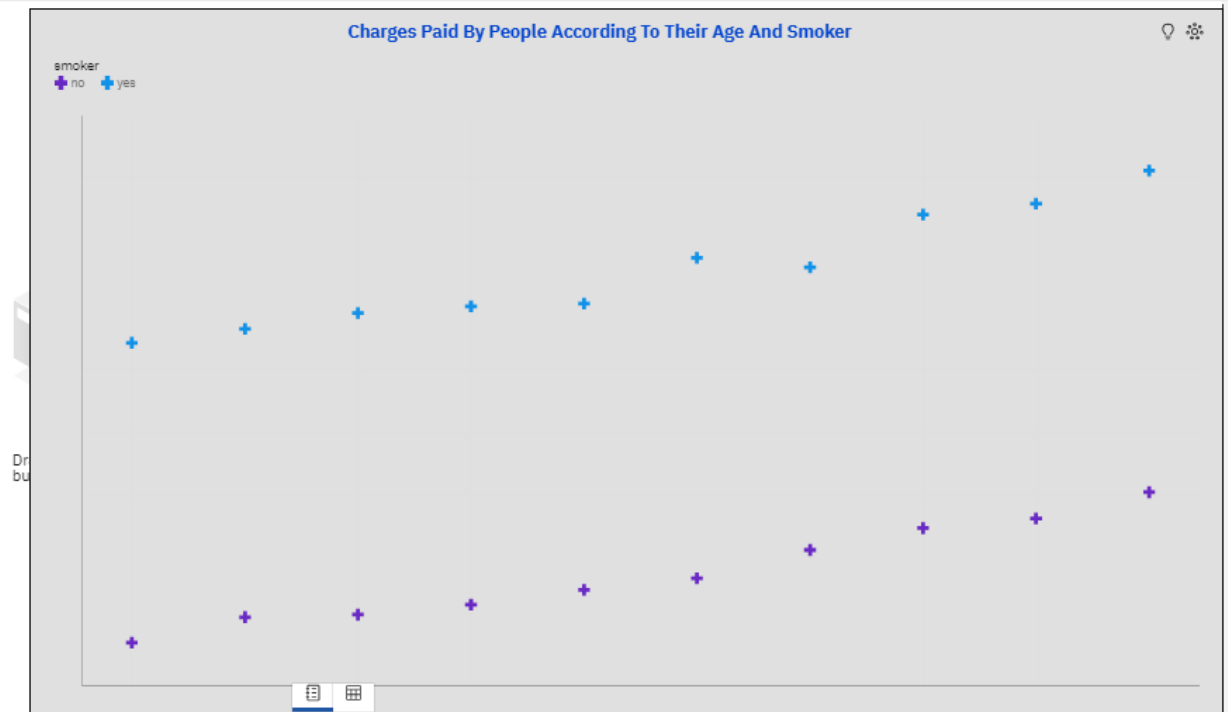
Medical Care Costs Story

- As age is increasing the average BMI of persons also increases. this means BMI and age are linearly proportional
- the maximum value of BMI by is like in middle age group it's little bit higher but as age increases the BMI values are getting decreased



Medical Care Costs Story

- Smokers of any age are paying more than non_smokers, the value is also almost 3 to 5x higher
- charges are getting increased as the age is also increasing in both scenarios



Medical Care Costs Story

- Males and smokers have the highest average BMI value compared to all
- females and smokers have the less average BMI values compared to all
- incase non smokers irrespective of gender their average BMI is almost similar.



Medical Care Costs Story

- southeast region people, both men and women are paying more charges compared to other region.
- south-east region smokers are the ones who are paying more charges
- out of all as we have seen smokers tend to pay more irrespective of region.



Smoking Is Not Only
Injuries To Health But
Also For Wealth

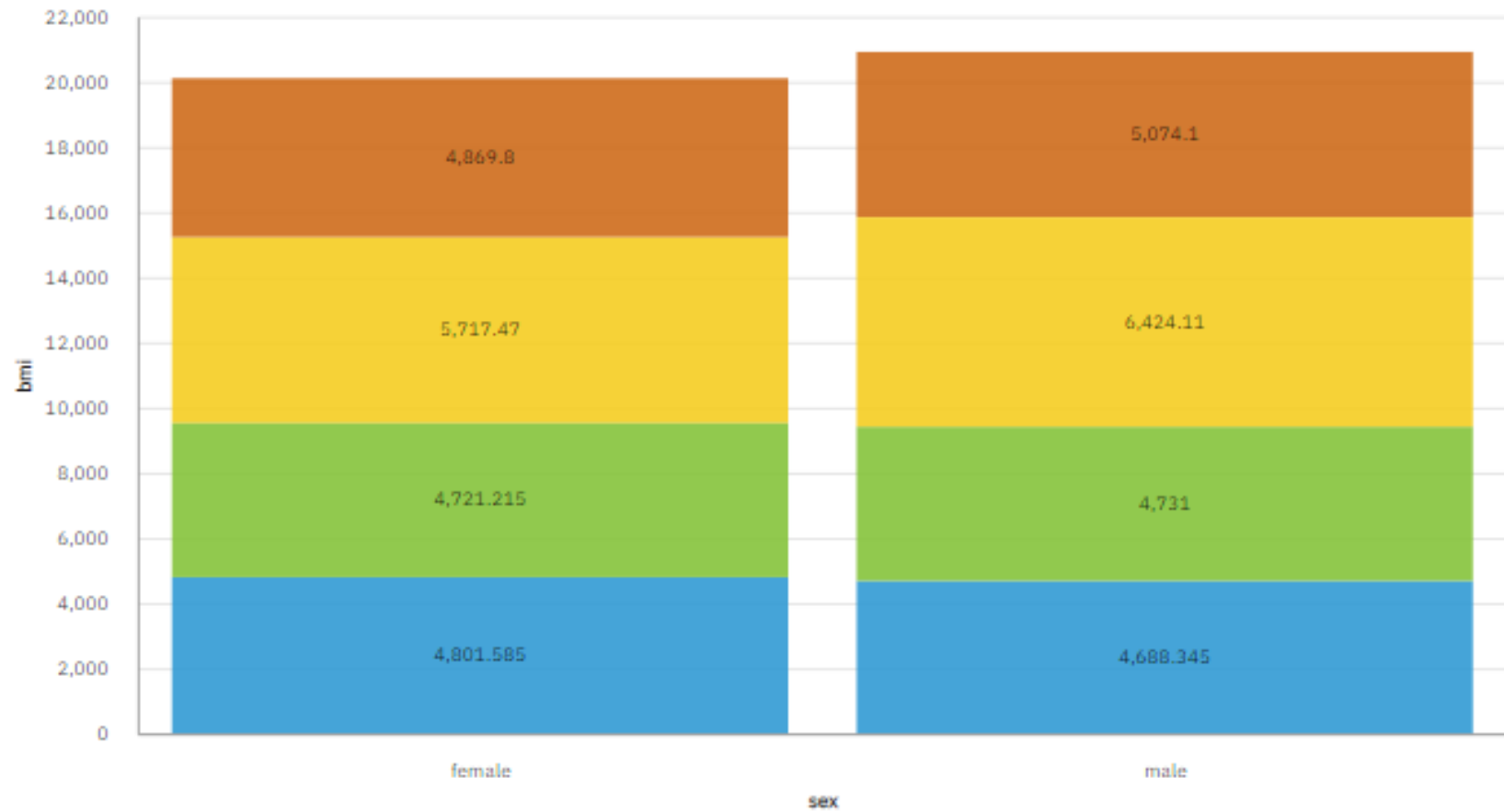
the number of female in northwest is higher than every other

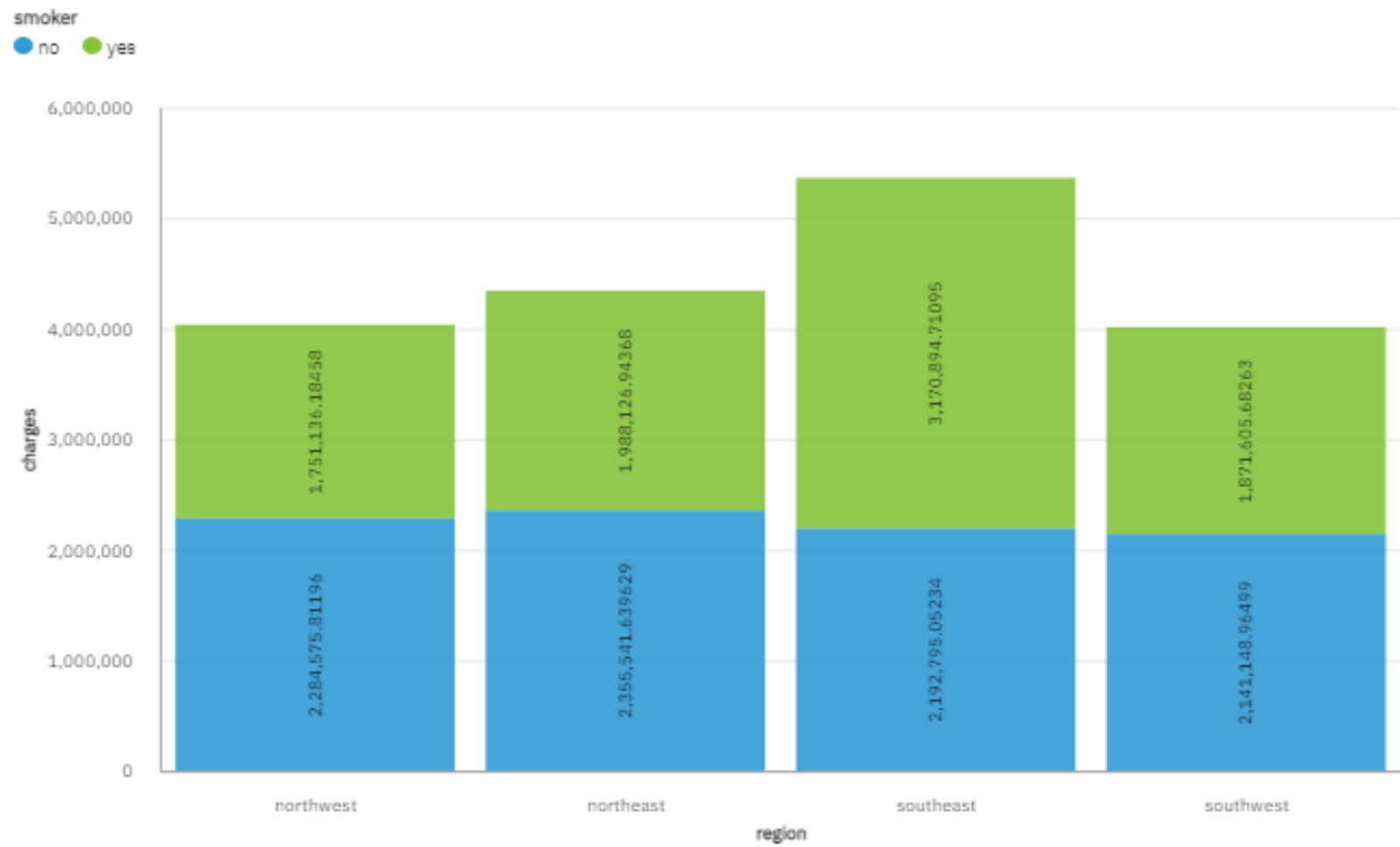


the bmi of south east is higher

region

● northwest ● northeast ● southeast ● southwest





Medical Care Cost Analysis in India

Indians are struggling with healthcare costs, so much so that its rise is pushing 5.5 crore Indians below the poverty line¹. India's per capita expenditure on health remains among the lowest in the world. India still spends only around 1.5% of its budget on health. Medical Care is Key For Development Nation

[Get Started](#)

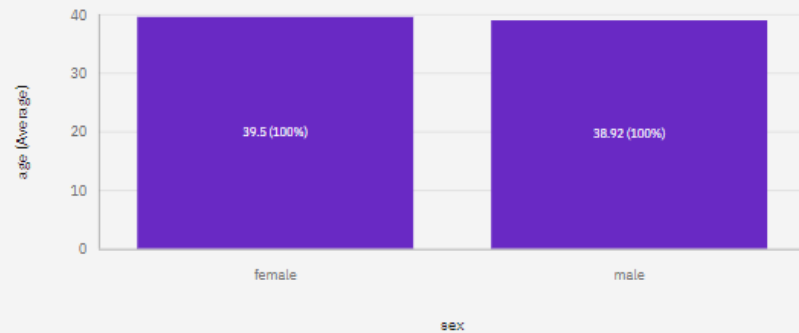


Tab 1

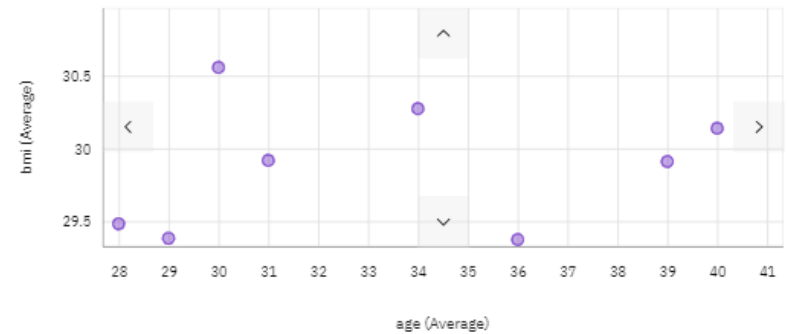
Tab 2

Tab 3

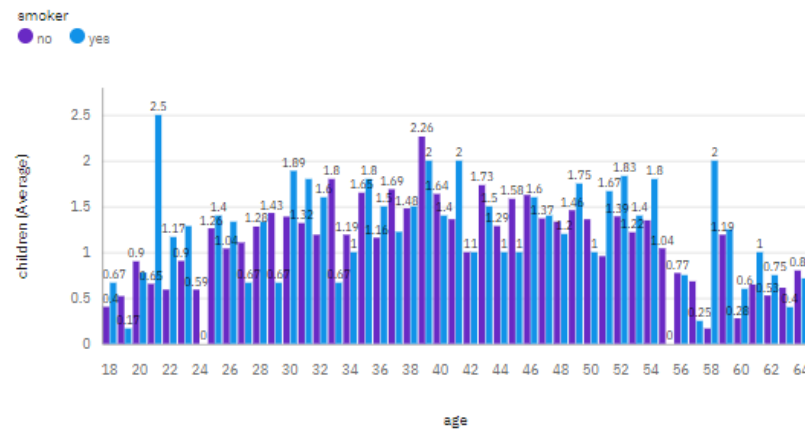
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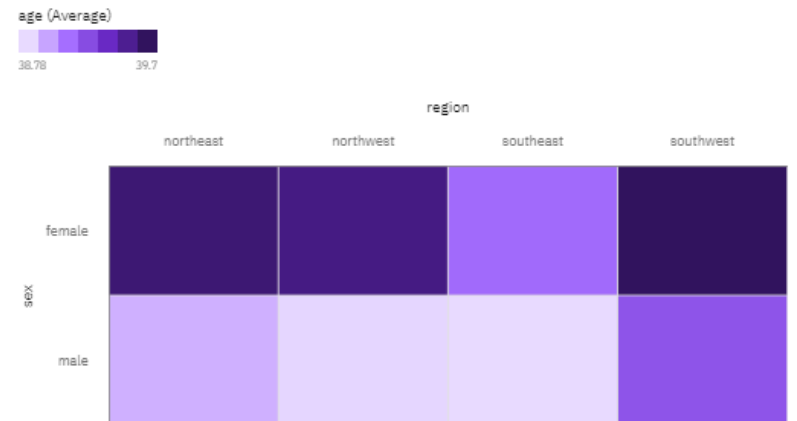
BMI of person based on their age



Average number of children by age and smoker or not

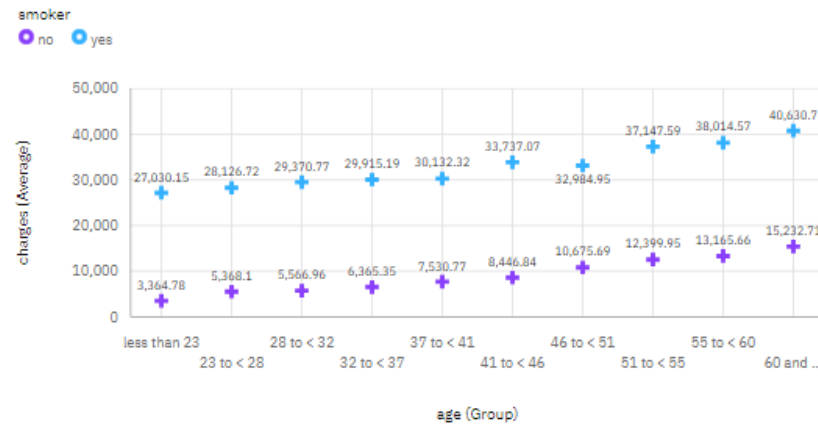


Average age of people according to their region and gender

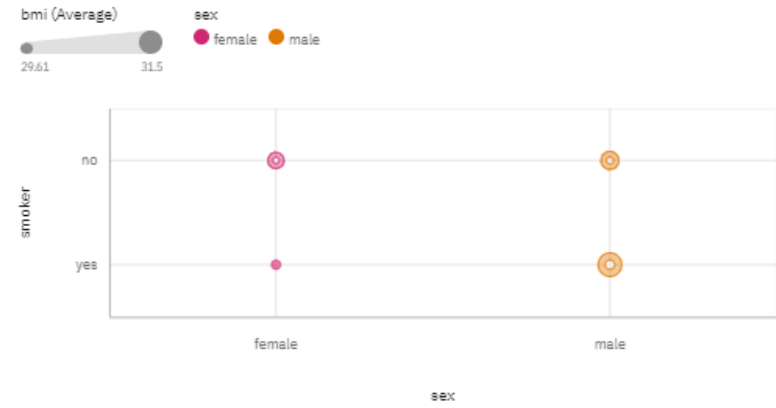


Tab 1 **Tab 2** Tab 3

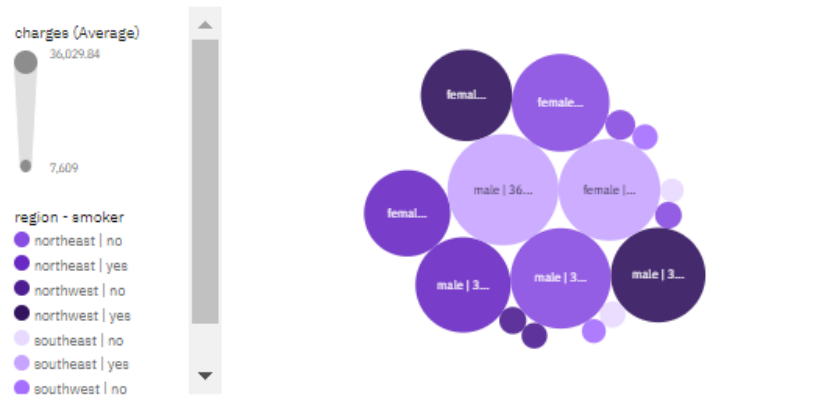
Charge paid by people according to their age and smoker



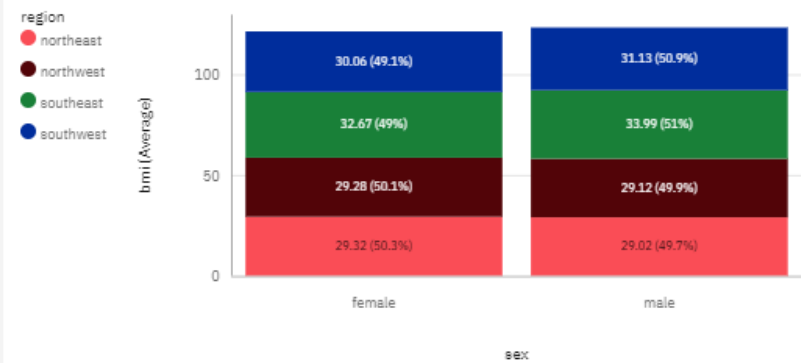
BMI of a person by their gender and smoker



charge paid by people according to their gender,region and somker

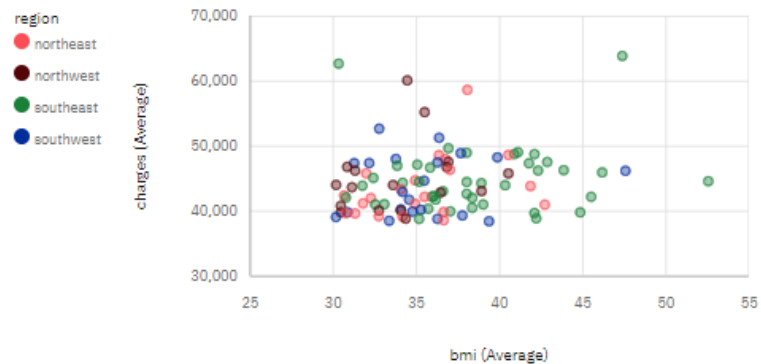


Average BIM of people by gender and region

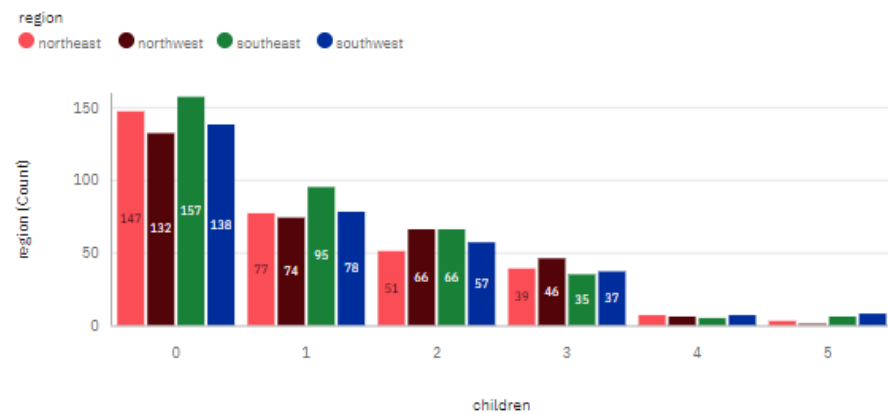


Tab 1 Tab 2 **Tab 3**

Top 100 charge paid by people by people based on BIM and colored by region



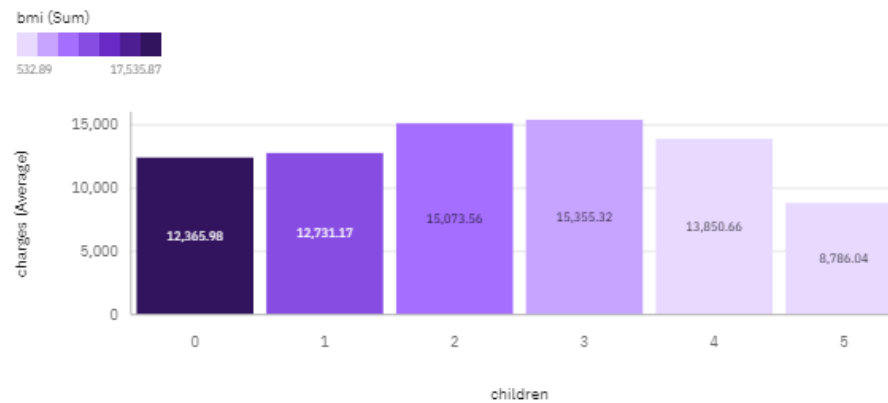
Number of children to the people by region



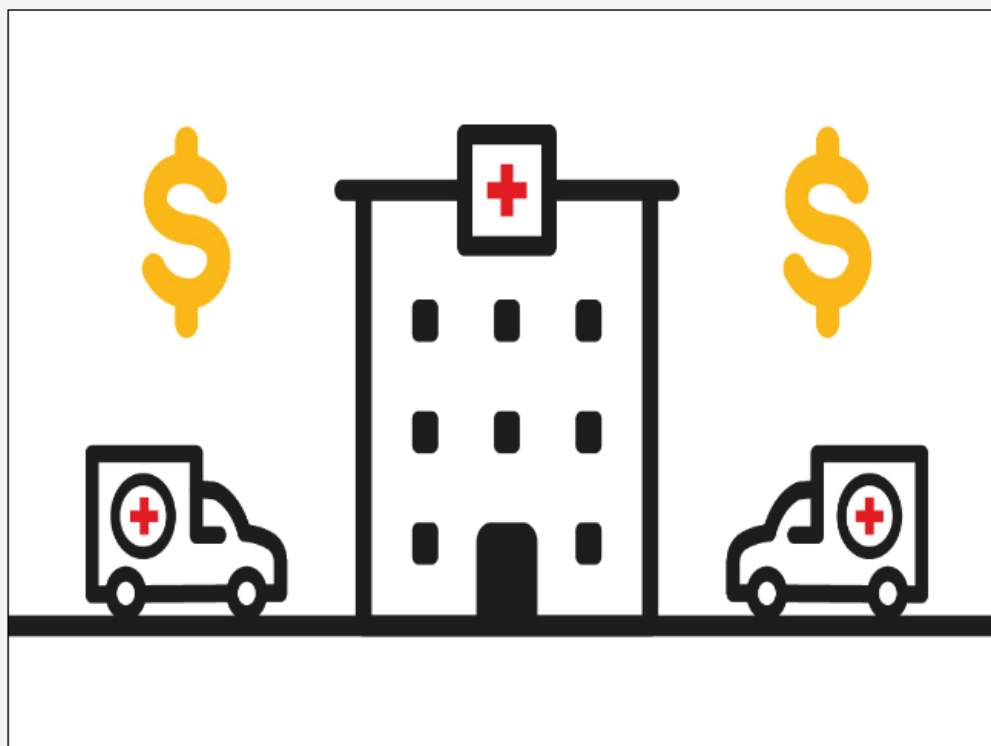
Charge paid by the people by region



Charge based on number of children

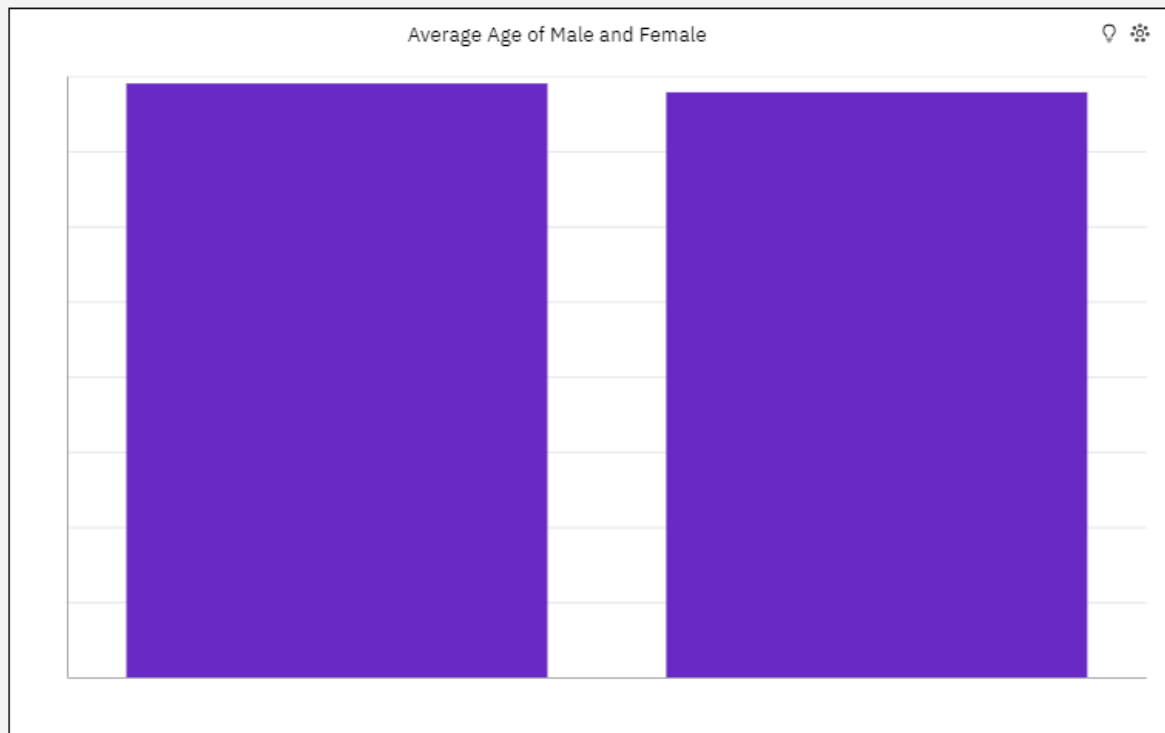


Medical Care costs story



Medical care costs story

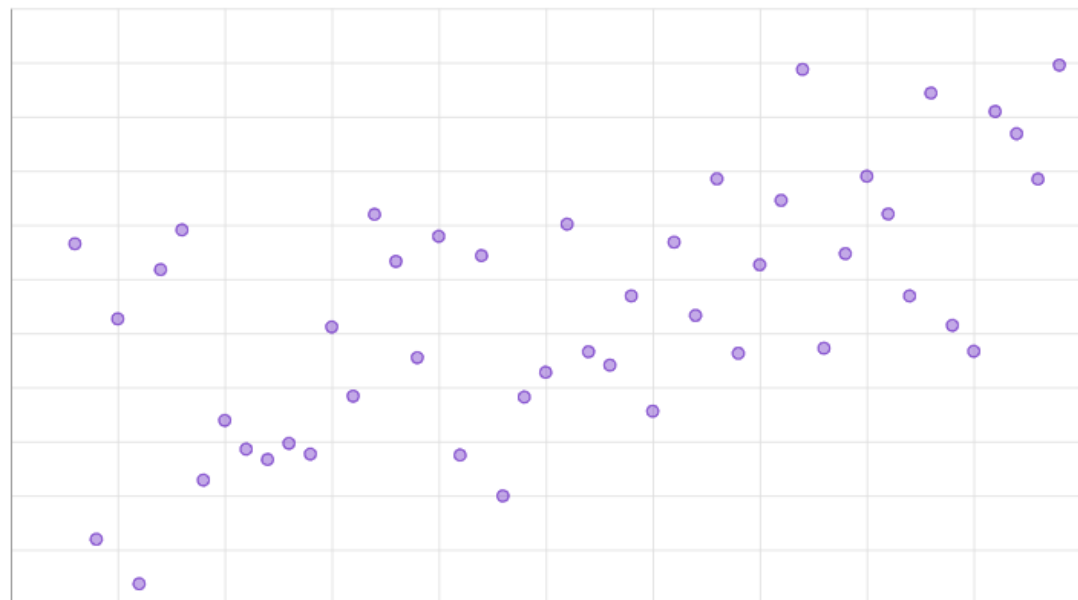
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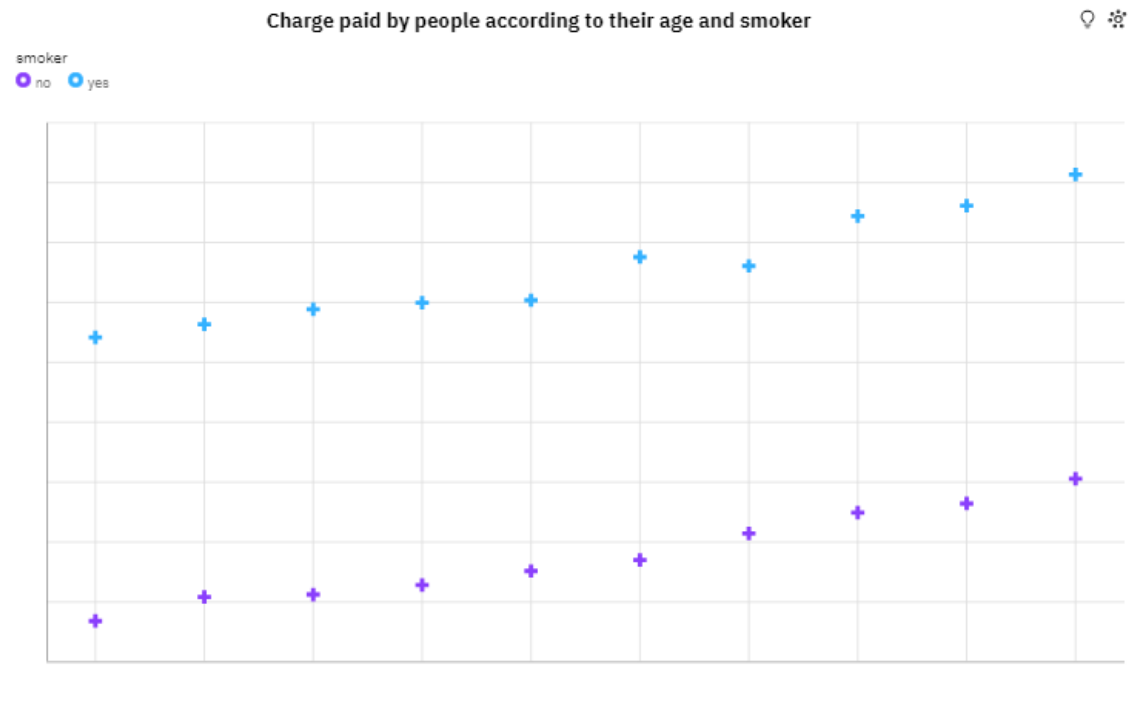
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BMI of person based on their age



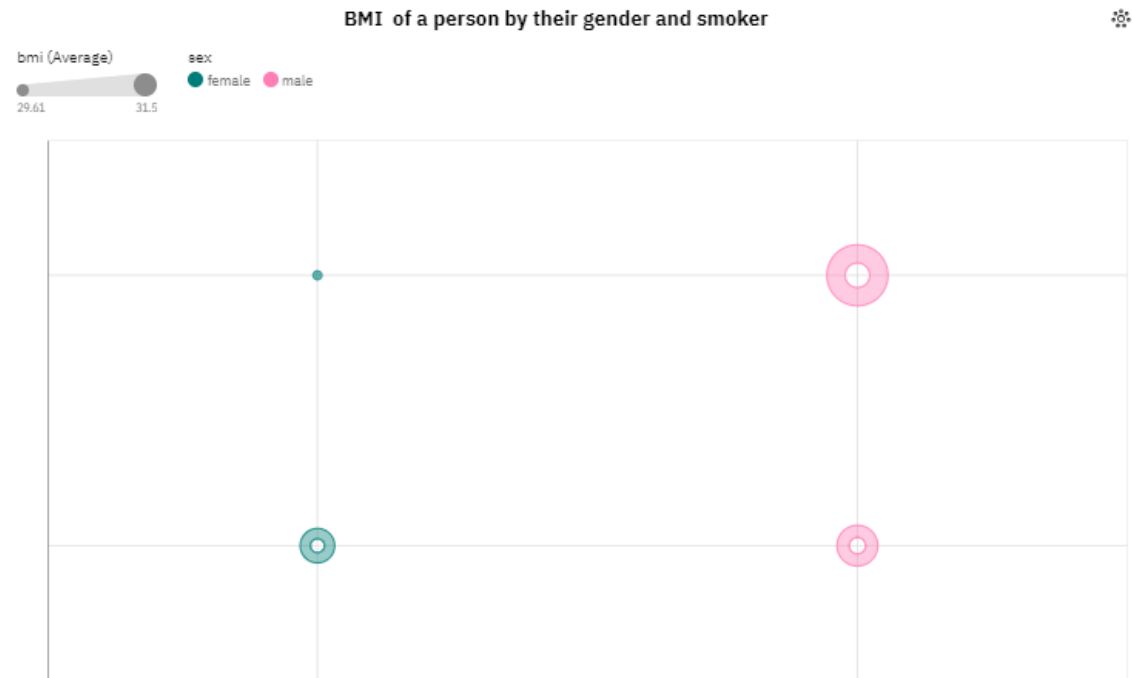
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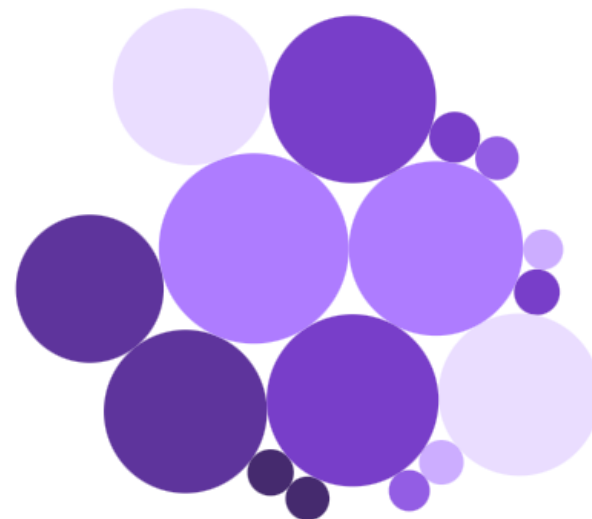
charge paid by people according to their gender, region and smoker

charges (Average)



region - smoker

- northeast | no
- northeast | yes
- northwest | no
- northwest | yes
- southeast | no
- southeast | yes
- southwest | no
- southwest | yes

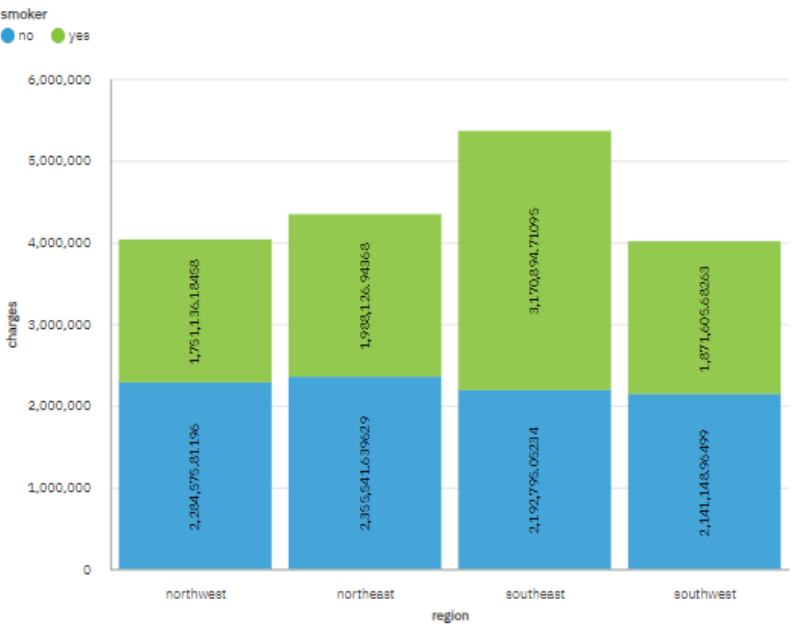
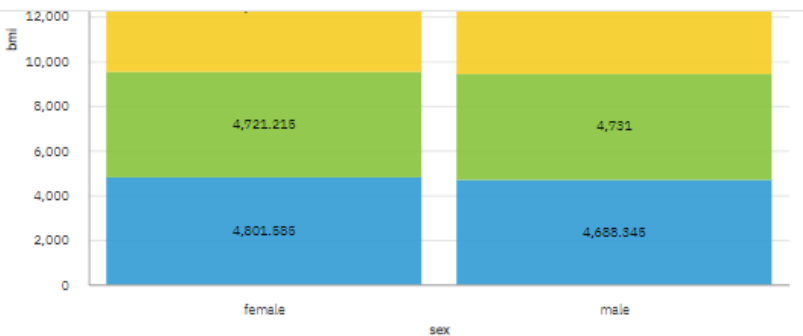


Smoking Is Not
Only Injuries To
Health But Also For
Wealth



Report

age
38.7830687830688
39.7037037037037



Contact

Magnam dolores commodi suscipit. Necessitatibus eius consequatur ex aliquid fuga eum quidem. Sit sint consectetur velit. Quisquam quos quisquam cupiditate. Et nemo qui impedit suscipit alias ea. Quia fugiat sit in iste officiis commodi quidem hic quas.



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contact@example.com



Call Us

+1 5589 55488 55
+1 6678 254445 41

Send Message

Advantages:

- Covers medical-related expenses. ...
- Ensures access to preventive care. ...
- Funds dental treatment. ...
- Gives add-on coverage for critical illnesses. ...
- Offers a cashless claim benefit. ...
- Ensures funding for alternative treatment. ...
- Provides for domiciliary treatment.

Disadvantages:

- Neglect of Rural Population: A serious drawback of India's health service is the neglect of rural masses.
...
- Emphasis on Curative Method: ADVERTISEMENTS:
...
- Inadequate Outlay for Health: ...
- Social Inequality: ...
- Shortage of Medical Personnel: ...
- Medical Research: ...
- Expensive Health Service:

Applications:

The cost of developing a healthcare app can vary greatly depending on the app's complexity, the technology used, the design and user experience, and the post-launch services required. On average, a basic healthcare app can cost between \$50,000 to \$100,000, while a more complex app can cost upwards of \$300,000 or more.

Conclusion:

- Provided novel insights to research problem approaches.
- Present the researcher's last words concerning the problem studied.
- This is really so nice experience to me.

Future scope:

- This is very useful for upcoming generations.
- Medical care cost is must used in many countries.
- Medical care cost are used in world wide.

END PROJECT

